

POWER SUPPLY NOISE IMMUNITY FOR AUDIO AMPLIFIER

Jeremy M. Ford

ABSTRACT OF THE DISCLOSURE

5 An audio amplifier configuration for a personal computer system optimizes performance in both the single-ended mode and the bridged mode. In a single-ended mode, as when the computer system user receives audio through headphones plugged into an external jack, a jack sense line is activated that switches into operation a power supply that is optimized for single-ended audio operation. In the bridged mode, as when the computer user receives audio from the system's internal speaker, operation is such that the audio amplifier is supplied by a power source optimized for operation in a bridged mode. In general, single-ended operation dictates that the audio amplifier power supply exhibit substantial noise immunity characteristics; whereas bridged-mode operation requires that the power supply be capable of supplying more demanding peak voltage and current excursions.